

Anti-CRM1 Picoband Antibody

Catalog # ABO12651

Product Information

Application	WB, IHC-P, IHC-F
Primary Accession	O14980
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Exportin-1(XPO1) detection. Tested with WB, IHC-P, IHC-F in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	7514
Other Names	Exportin-1, Exp1, Chromosome region maintenance 1 protein homolog, XPO1, CRM1
Calculated MW	123386
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, By Heat Immunohistochemistry(Frozen Section), 0.5-1 μ g/ml Western blot, 0.1-0.5 μ g/ml
Subcellular Localization	Cytoplasm. Nucleus, nucleoplasm. Nucleus, Cajal body. Nucleus, nucleolus. Located in the nucleoplasm, Cajal bodies and nucleoli. Shuttles between the nucleus/nucleolus and the cytoplasm.
Tissue Specificity	Expressed in heart, brain, placenta, lung, liver, skeletal muscle, pancreas, spleen, thymus, prostate, testis, ovary, small intestine, colon and peripheral blood leukocytes. Not expressed in the kidney. .
Source	Eukaryota
Protein Name	Exportin-1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	E.coli-derived human CRM1 recombinant protein (Position: N966-D1071). Human CRM1 shares 93.4% and 91.5% amino acid (aa) sequence identity with mouse and rat CRM1, respectively.

Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Protein Information

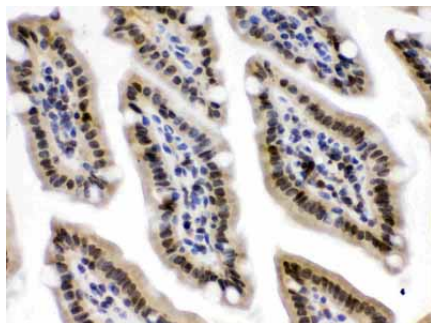
Name	XPO1
Synonyms	CRM1
Function	Mediates the nuclear export of cellular proteins (cargos) bearing a leucine-rich nuclear export signal (NES) and of RNAs. In the nucleus, in association with RANBP3, binds cooperatively to the NES on its target protein and to the GTPase RAN in its active GTP-bound form (Ran-GTP). Docking of this complex to the nuclear pore complex (NPC) is mediated through binding to nucleoporins. Upon transit of a nuclear export complex into the cytoplasm, disassembling of the complex and hydrolysis of Ran-GTP to Ran-GDP (induced by RANBP1 and RANGAP1, respectively) cause release of the cargo from the export receptor. The directionality of nuclear export is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus. Involved in U3 snoRNA transport from Cajal bodies to nucleoli. Binds to late precursor U3 snoRNA bearing a TMG cap.
Cellular Location	Cytoplasm. Nucleus, nucleoplasm. Nucleus, Cajal body. Nucleus, nucleolus. Note=Located in the nucleoplasm, Cajal bodies and nucleoli. Shuttles between the nucleus/nucleolus and the cytoplasm
Tissue Location	Expressed in heart, brain, placenta, lung, liver, skeletal muscle, pancreas, spleen, thymus, prostate, testis, ovary, small intestine, colon and peripheral blood leukocytes. Not expressed in the kidney.

Background

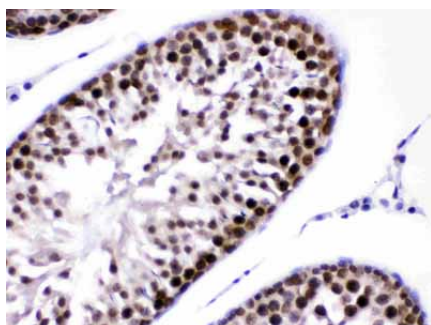
Exportin 1 (XPO1), also known as chromosomal maintenance 1 (CRM1), is an eukaryotic protein that mapped to human chromosome 2p16 by fluorescence in situ hybridization. This protein mediates leucine-rich nuclear export signal (NES)-dependent protein transport. It specifically inhibits the nuclear export of Rev and U snRNAs. Additionally, this protein is involved in the control of several cellular processes by controlling the localization of cyclin B, MPAK, and MAPKAP kinase 2. It also regulates NFAT and AP-1.

Images

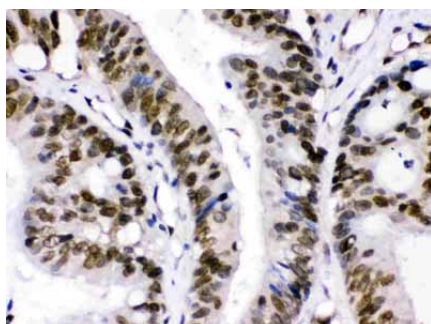
Western blot analysis of CRM1 expression in rat cardiac muscle extract (lane 1), mouse brain extract (lane 2) and A549 whole cell lysates (lane 3). CRM1 at 123KD was detected using rabbit anti-CRM1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12651) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .



CRM1 was detected in paraffin-embedded sections of mouse intestine tissues using rabbit anti- CRM1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12651) at 1 μ g/mL. The immunohistochemical section was developed using SABC method .



CRM1 was detected in paraffin-embedded sections of rat testis tissues using rabbit anti- CRM1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12651) at 1 μ g/mL. The immunohistochemical section was developed using SABC method .



CRM1 was detected in paraffin-embedded sections of human intestinal cancer tissues using rabbit anti- CRM1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12651) at 1 μ g/mL. The immunohistochemical section was developed using SABC method (Catalog # SA2002).

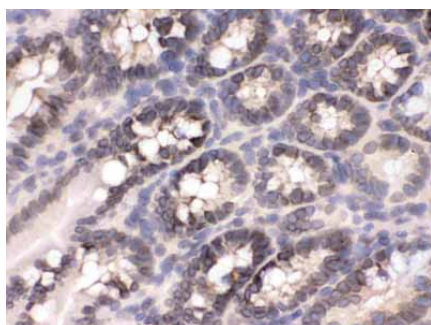
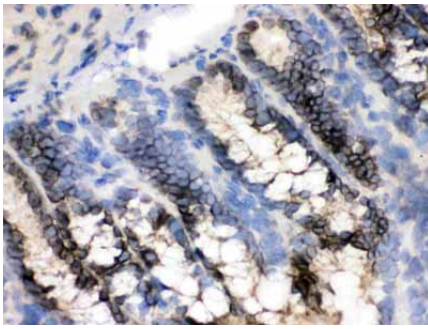


Figure 5. IHC analysis of CRM1 using anti-CRM1 antibody (ABO12651).CRM1 was detected in frozen section of mouse intestine tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti-CRM1 Antibody (ABO12651) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Figure 6. IHC analysis of CRM1 using anti-CRM1 antibody (ABO12651).CRM1 was detected in frozen section of rat



intestine tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti-CRM1 Antibody (ABO12651) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

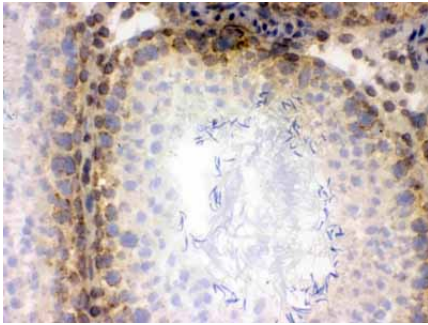


Figure 7. IHC analysis of CRM1 using anti-CRM1 antibody (ABO12651). CRM1 was detected in frozen section of rat testis tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti-CRM1 Antibody (ABO12651) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.